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Research Article

Effectiveness, Accessibility, Affordability, Availability, And Customer Satisfaction Of Generic Medicines In Pradhan Mantri Jan Aushadhi Yojana

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ABSTRACT

Jan Aushadhi Scheme was launched in November 2008 by the Department of medicinal, Ministry of Chemicals and Diseases, Government of India. Only 80 'Jan Aushadhi Stores' were in operation in some states till May 2014. The Government revamped 'Jan Aushadhi Scheme as 'Pradhan Mantri Jan Aushadhi Yojana' (PMJAY) in September 2015. It was renamed the Pradhan Mantri Jan Aushadhi Pariyojana. (PMBJP) to increase the scheme's appeal. This research explores the Pradhan Mantri Jan Aushadhi Yojana (PMJAY) and its impact on im-proving healthcare drug accessibility, affordability, efficacy, and customer satisfaction through the provision of generic medicines in India. The literature review examines consumer perceptions, knowledge, and attitudes toward generic drugs, highlighting the potential of such initia-tives while acknowledging existing challenges. The objective of the research is to assess the effectiveness, accessibility, affordability, availabil-ity, and customer satisfaction of generic medicines available under the Pradhan Mantri Jan Aushadhi Yojana (PMJAY). To achieve the objec-tive a comprehensive analysis of 12 articles has been done. Also, a visit to a Pradhan Mantri Jan Aushadhi Kendra was done to evaluate the operational of the scheme. Findings reveal the Pradhan Mantri Jan Aushadhi Yojana (PMJAY) success in providing affordable medicines to underserved populations, generating cost savings, garnering positive feedback from customers, and making them available easily. However, it has been observed that low awareness and misconceptions remain significant hurdles. The paper concludes that the scheme holds immense promise but requires targeted efforts to overcome barriers to acceptance of generic drugs available under the scheme. Recommendations in-clude awareness campaigns, supply-side

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regulations, pricing policy review, and customer-centric strategies to further enhance the program's impact and healthcare accessibility in India.

INTRODUCTION

The implication of medicines in human life cannot be over-stated, as they play an essential role in promoting longer, healthier, and more fulfilling lives. Medications enable the treatment and cure of various medical conditions, manage chronic ailments, prevent diseases, and enhance our understanding of the human body. Recognizing the importance of drugs allows us to escalate the irreplaceable efforts of count-less individuals committed to improving the health and well-being of others. Notable examples of medical advancements include the successful eradication of smallpox and polio through vaccines, the life-saving impact of antibiotics against once-fatal infections, and the substantial enhancement in the quality of life through pain relievers and treatments for chronic ailments. Additionally, progress in cancer treatments has offered hope and a lifeline to numerous individuals diagnosed with the disease. Despite being a leading exporter of generic drugs globally, a significant proportion of the Indian population faces a lack of access to affordable medications. Recent research, based on a cross-sectional analysis of data from the National Sample Survey Organization (NSSO), a Press Release of the Ministry of Health and Family Welfare on High cost on medical expenditure reveals that millions of Indians are being pushed into poverty due to the burden of funding their healthcare, with a significant portion falling lower than the poverty line solely due to spending on medicines. This highlights the urgent need for an effective scheme like the Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) to address issue of healthcare affordability and accessibility in the country. [1] Generic medicines, which are released when the patent on a branded drug expires, play a

vital role in providing cost-effective treatment options. These generic drugs are identical in

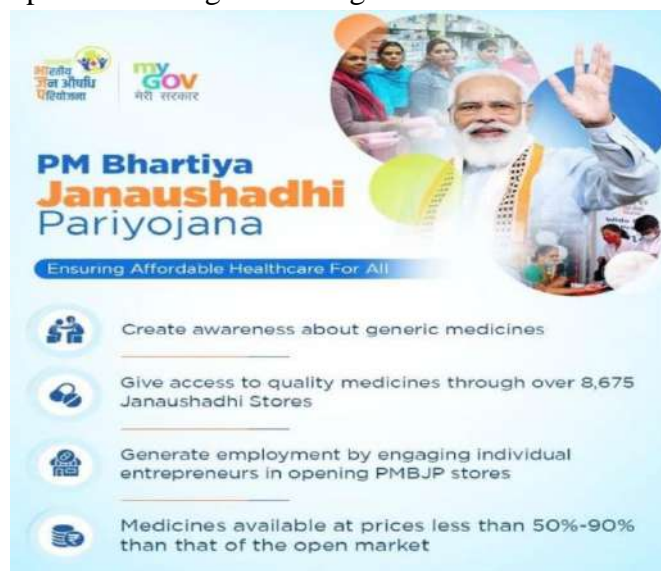


Figure 1

terms of energy, quality, and effectiveness to their branded counterparts.

Initiatives such as the PMBJP aim to make quality generic medicines and implants accessible at affordable prices to the public. The scheme has gained popularity across India, particularly among individuals with average to low-income backgrounds, making affordable medicines more readily available. [2] The Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) initiated as the Jan Aushadhi Scheme in 2008 and later rebranded as PMJAY, has been a significant step towards furnishing quality drugs at affordable prices through dedicated outlets known as 'Pradhan Mantri Bhartiya Jan Aushadhi Kendra.' The scheme has effectively reduced healthcare expenses for patients and popularized the use of generic medicines among the masses, dispelling the misconception that low-priced generics are of inferior quality. The successful implementation of PMBJP is attributed to the Pharmaceuticals and Medical Devices Bureau of India (PMBI), formerly known as the Bureau of Pharma PSUs of India (BPPI). As an independent organization founded by pharmaceutical PSUs, PMBI operates under a focused and empowered

structure to carry out the Jan Aushadhi cam-paign. With its robust governance and decision-making bod-ies, including the Governing Council (GC) and Executive Council (EC), PMBI has effectively managed the procure-ment and distribution of generic medicines to various Pra-dhan Mantri Bhartiya Jan Aushadhi Kendras (PMBJKs) across the country.[1] [2] To make quality generic medicines available at affordable prices to all, Pradhan Mantri Bhartiya Jan Aushadhi Pari-yojana (PMBJP) was launched by the Department of Pharma-ceuticals, Ministry of Chemicals & Fertilizers, Government of India in November 2008. Under the scheme, dedicated outlets known as Jan Aushadhi Kendras are opened to pro-vide generic medicines at affordable prices. As of 31.03.2023, 9303 Jan Aushadhi Kendras are functional across the country. The product basket of PMBJ comprises 1800 drugs and 285 surgical items. The Scheme is imple-mented by a society registered under the Societies Registra-tion Act, viz., Pharma & Medical Bureau of India (PMBI) [erstwhile Bureau of Pharma PSUs of India (BPPI)]. The ob-jectives of the scheme are as follows: -

1. Ensure access to quality medicines for all sections of the population especially the poor and the deprived ones.
2. Create awareness about generic medicines through edu-cation and publicity to counter the perception that quality is synonymous with high price only.
3. Generate employment by engaging individual entrepre-neurs in the opening of PMBJP Kendra.[2]

Some of the salient features of the scheme are as follows: -

1. The program operates through both government agencies and private entrepreneurs.
2. Kendra owners are incentivized with an increased amount, raised from the previous

Rs. 2.50 lakh to a maximum of Rs. 5.00 lakh. This incentive is calculated at 15% of their month-ly purchases, capped at Rs. 15,000 per month.

3. Special one-time incentives of Rs. 2.00 lakh are granted for furniture & fixtures, computers, and printers for PMBJP Kendras in North-Eastern States, Himalayan regions, Island territories, and backward areas identified as aspirational districts by NITI Aayog. Additionally, these incentives apply to Kendras established by women entrepreneurs, Divyang (specially-abled individuals), SCs & STs, and Ex-servicemen.
4. Jan Aushadhi medicines are priced 50%-90% lower than branded medicines available in the open market.
5. Medicines are exclusively sourced from suppliers certified by the World Health Organization - Good Manufacturing Practices (WHO-GMP) to ensure product quality.
6. Rigorous quality control measures are implemented, with each drug batch tested at laboratories accredited by the "National Accreditation Board for Testing and Calibration Laboratories (NABL)" to guarantee the highest quality standards.[1][2]

The scheme's success is evident in the substantial savings it has generated for citizens. Through its pricing policy, which ensures that generic medicines cost no more than 50% of the average cost of the top three branded medications, PMBJP has made medications available at significantly discounted rates, ranging from 50% to 90% cheaper than branded and generic alternatives. The PMBI reported sales of over Rs. 1000 crore between February 15, 2022, and February 15, 2023, resulting in substantial financial relief and improved accessibility to medicines for citizens. For example, Atorvas-tatin costs Rs 147 in the market and the PMBJP price is Rs 12.10 which accounts for 92% savings, Amoxicillin's average



market price is Rs 122 and at PMBJP it costs Rs 50 which accounts for 54% savings. Similarly, many more medicines are available at highly discounted rates in Jan Aushadhi Kendra. For example, Atorvastatin costs Rs 147 in the market and the PMBJP price is Rs 12.10 which accounts for 92% savings, Amoxicillin's average market price is Rs 122 and at PMBJP it costs Rs 50 which accounts for 54% savings. Similarly, many more medicines are available at highly discounted rates in Jan Aushadhi Kendra. For example, Atorvastatin costs Rs 147 in the market and the PMBJP price is Rs 12.10 which accounts for 92% savings, Amoxicillin's average market price is Rs 122 and at PMBJP it costs Rs 50 which accounts for 54% savings. Similarly, many more medicines are available at highly discounted rates in Jan Aushadhi stores.[1] To ensure the quality of medicines, the PMBJP strictly sources medicines from suppliers with World Health Organization-Good Manufacturing Practices (WHO-GMP) and Food Safety and Standards Authority of India (FSSAI) certifications. Quality control measures, including testing at facilities with NABL accreditation, are rigorously enforced. The PMBI's commitment to quality is evidenced by the exceptional performance of over 99% of batches meeting quality parameters.[1] The influence of PMBJP has been far-reaching, with an estimated

collectively saved up to Rs. 20,000 crores, a testament to the scheme's impact on reducing healthcare expenditure. Moreover, the scheme's implementation has provided opportunities for self-employment, benefiting individuals through "Sewa Bhi-Rozgar Bhi" initiatives.[1] PMBJP's logistics and storage system have been optimized for efficiency, with IT-enabled end-to-end supply chain management and strategically located warehouses ensuring timely delivery of medicines across the country. Collaborating with 36 distributors selected across states and union territories has further bolstered the supply chain structure.



Figure 3

The scheme's product basket continues to expand, with innovative pharmaceuticals, nutraceutical items, Ayush products, and medical devices being introduced based on market trends and feedback from stakeholders and PMBJKs. This dynamic approach to product additions reflects the government's commitment to meeting diverse healthcare needs. The ongoing expansion aims to reach 2000 medications and 300 surgical procedures by March 2024, with an expert committee dedicated to suggesting new additions.[1] The graph below shows the number of Jan Aushadhi Stores that have been opened in India from 2017-2023. It reflects that there has been a hike in the number of stores every year and



Figure 2

ten lakh individuals attending Jan Aushadhi Kendra's daily. Over the years, citizens have

in the year 2020-2021 and 2021-2022 it surpassed the target benchmark as well.

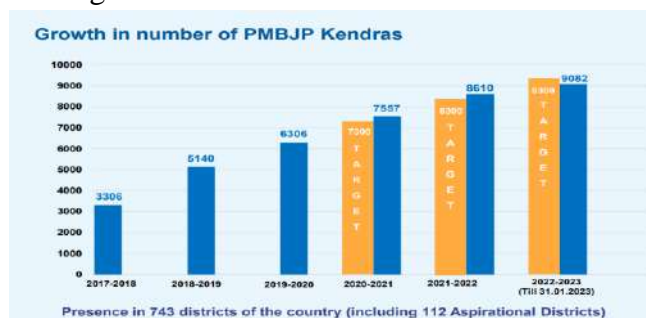


Figure 4

The Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana has emerged as a transformative scheme, addressing the pressing issue of healthcare affordability and accessibility in India. By providing quality generic medicines at significantly reduced prices, PMBJP has positively impacted the lives of millions, contributing to improved health outcomes and a more equitable healthcare system. The success of this scheme stands as evidence of the collective efforts of various stakeholders, underscoring the potential of targeted initiatives in advancing public health and well-being.[1][2]

OBJECTIVE

The primary objective of the study is to assess the Effectiveness, Accessibility, Affordability, Availability, and Customer Satisfaction of generic medicines in the Pradhan Mantri Jan Aushadhi Yojana. The secondary objective is to examine factors such as consumer perceptions, knowledge, and attitudes toward generic medicines, the impact of pricing policies, affordability and availability of essential medicines, customer buying behavior, and the role of awareness campaigns.

METHODS AND MATERIALS

This paper is based on a review of the literature and data has been collected from 12 articles that encompass and explore different aspects of the implementation and acceptance of generic medicines through initiatives like the Jan Aushadhi Programme in India. Context Analysis

study was undertaken to fulfill the objectives. Electronic databases, such as Re-search Gate, Google Scholar, and PubMed were used to identify suitable literature published in the years 2007 to 2023 along with the ministry website. Affordability was measured based on the ability of individuals to access essential medicines without financial hardship. Efficacy refers to the ability of medicines to produce desired therapeutic effects under ideal conditions. Availability involves the presence of essential medicines in appropriate forms and quantities at healthcare facilities. Customer satisfaction assessed whether expectations regarding quality and experience were met. Limitations included potential publication bias and generalizability due to diverse study populations. Despite these limitations, the research aimed to provide valuable insights into the program's impact on healthcare accessibility and affordability.

Findings:

The research works discussed in this study provide valuable and comprehensive insights into India's Jan Aushadhi Programme, focusing on the effectiveness, accessibility, affordability, availability, and customer satisfaction of generic medicines

EFFECTIVENESS

Studies emphasize generic medicines' potential to enhance affordable healthcare access. Clear information, awareness, and improved packaging are crucial to overcome barriers and boost acceptance. Involving private entities in procurement and promoting generics are key recommendations for effectiveness. [3][4]

ACCESSIBILITY

To enhance accessibility, increasing Jan Aushadhi centers and shops, especially in rural areas, is crucial. Engaging medical practitioners, dispelling misconceptions, and promoting clear labeling are vital. Public-private partnerships and replicating successful models like the Jan

Aushadhi campaign can provide affordable, quality medicines widely.[2][5][6]

AFFORDABILITY

India's Jan Aushadhi program enhances drug access for un-der-served groups. The involvement of private companies and Jan Aushadhi medicines improves affordability. Challenges remain, including low awareness about Jan Aushadhi Kendras.[5][7][8]

CUSTOMER-SATISFACTION

Customer satisfaction in the Jan Aushadhi Programme and stores hinges on addressing store-related concerns, enhanc-ing public awareness, and promoting generic medicines. Key factors include cost, quality, trust, promotions, awareness, psychology, and availability.[9][10]

COSTING

Regularly review pricing policies for generic drugs like the Jan Aushadhi scheme, and regulate the supply side to prevent overprescribing expensive branded drugs. Consider cost-effectiveness and patient impact in healthcare policy plan-ning. Encourage healthcare providers to discuss and promote contraceptives as cost-effective options. Ensure clear com-munication and information dissemination about generic and brand-name medications to increase patient awareness and acceptance.[5][8][11]

LACK OF AWARENESS

Address the lack of awareness and misconceptions, especial-ly among the elderly, about generic drugs like Jan Aushadhi. Counter distrust, concerns about drug companies' influence, and skepticism by providing clear information and improved packaging. Raising public awareness is vital to promoting the use of Jan Aushadhi medicines.[12][13]

COMPARISON WITH OTHER NATIONS

Growing trust in generic medicines in India due to wide-spread use and treatment success. In contrast, a study in Western Australia reveals seniors' mistrust and confusion about generic medicines,

citing concerns about pharmaceuti-cal companies' influence, foreign manufacturers, and equiva-lence of generics.[6][14][15]

DISCUSSION

The research findings align with global efforts to enhance the accessibility, affordability, and acceptance of generic medi-cines, particularly through programs like India's Jan Aushad-hi. Comparable challenges in affordability and availability resonate with international studies, emphasizing the need for continuous pricing policy review and effective public health policies. Customer satisfaction, rooted in trust and clear communication, echoes concerns highlighted in global re-search, with a shared emphasis on addressing store-related issues. The challenge of lack of awareness and trust in gener-ic drugs, especially among the elderly, is mirrored in interna-tional contexts, underscoring the necessity for targeted awareness campaigns.[13] Comparisons with other nations, like Western Australia, reveal varying perceptions of generic medicines, emphasizing the importance of tailored approach-es to address specific concerns globally. [14]Collaborative efforts are crucial to fostering a comprehensive understand-ing and ensuring equitable access to generic medicines on a global scale.

CONCLUSION

After reviewing the various research papers and studies, it can be concluded that the Pradhan Mantri Jan Aushadhi Yojana (PMJAY) has been successful in improving accessi-bility, affordability, availability, and customer satisfaction of generic medicines in India. The scheme has effectively pro-vided affordable medicines to those in need, particularly the underprivileged and uninsured. It has led to significant cost savings for consumers and positive feedback from customers. However, challenges persist, including the need for greater awareness and addressing misconceptions. To further en-

hance the program's impact, efforts should focus on public awareness, supply-side regulations, and medicine pricing policies. Overall, the PMJAY has shown great potential in making healthcare more accessible and affordable, but continuous improvements are necessary to achieve even better outcomes for the population.

RECOMMENDATIONS

The research findings suggest several key recommendations to enhance the Pradhan Mantri Jan Aushadhi Yojana (PMJAY) and improve accessibility, affordability, availability, and customer satisfaction of generic medicines. Firstly, launching targeted awareness campaigns is crucial to educate the public and healthcare providers about the benefits and quality of generic medicines, addressing misconceptions, and promoting their acceptance. Secondly, strengthening supply-side regulations, including quality assurance measures and regular audits, will ensure the availability of high-quality medicines. Thirdly, a thorough review of the medicine pricing policy is essential to maintain affordability and prevent costly prescriptions. Additionally, expanding the product basket, fostering public-private partnerships, enhancing customer experience, and conducting periodic evaluations will contribute to the success of the PMJAY and improve healthcare outcomes for the Indian population.

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